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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/422,998	10/21/1999	DANIEL W. HEPNER	10990763-1	6218

7590 05/21/2003

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EXAMINER

PHAM, HUNG Q

ART UNIT	PAPER NUMBER
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2172

DATE MAILED: 05/21/2003

19

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/422,998

Applicant(s)

HEPNER ET AL.

Examiner

HUNG Q PHAM

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 April 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14, 16-18 and 20-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14, 16-18, and 20-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments with respect to claims 1-14, 16-18, and 20-22 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**3. Claims 1-4, 8-10, 13, 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyachi [USP 6,108,492].**

Regarding to claim 1, Miyachi teaches a method for providing notification of a technician remote from a machine of the need for machine assistance (Miyachi, Col. 3, lines 43-57). As shown in FIG. 1 is a LAN 100 includes a file server 120, workstations 150, printers 180 and a Host 110b coupled to one another via network communications lines 160 (Miyachi, Col. 4, line 38-Col. 5, line 8). As shown in FIG. 2 is a data processing system comprising the MFP 110a (multifunction peripheral), and the Host 110b. The MFP 110a includes a non-volatile rewritable data storage device 245 for storage of various information, include information regarding the status of operation of the MFP 110a. The Host 110b is responsible for periodically initiating a refresh of a status information database, which is obtained from the MFP 110a and stored in the non-volatile rewritable data storage device 240. (Miyachi, Col. 5, line 9-Col. 8, line 67). As shown in FIG. 4 is a process for retrieving status information of a MFP. After the program has been loaded in step 410, the program allows a technician to select a number of MFP status conditions as shown in Tables 1-2, or the entire database to monitor in step 420. In step 425-430, the technician is allowed to designate a notification method and select a number of trigger conditions. Status information is retrieved, and the Host's MFP status database is updated at steps 440-445. If the process is to continue, then the processor 230 analyzes the status information database in step 455, and determines if any of the trigger conditions have been met in step 460

(Miyachi, Col. 9, line 35-Col. 10, line 57). Thus, the processor 230 receives a trigger condition from a technician as a request for notifying the client the condition of an attribute of MFP, and the technique as discussed indicates the steps of *receiving a request from a client to notify said client of a condition of an attribute of a system; deriving data about said system attribute to determine if said condition exists*. Miyachi further discloses the step of *upon determining that said condition exists, notifying the client of the existence of said condition* by initiating a notification in step 465 as indicated in the settings received in step 425 (Miyachi, Col. 10, lines 58-65). Miyachi does not explicitly teach the *request comprises information specifying a query for said system attribute*; and *using said query for monitoring said system for existence of said condition of said attribute*. However, as shown in FIG. 4, a technician is allowed to select a number of MFP status conditions to monitor in step 420. Preferably, the technician may be notified of any of the status conditions in Table 1 and Table 2 of Cols. 6-8, and there is an option to provide the entire database. In step 425 the technician is allowed to designate a notification method. This preferably comprises designating the telephone number of the remote monitoring computer 170, but might also include designating a workstation 150 on the LAN 100 to be notified. Next, the program allows the technician to select a number of trigger conditions to trigger notification in step 430. The technician preferably may select particular values at which a trigger condition is to be met. For example, the technician might want to be notified when the fuser counter reaches a particular value. Preferably, the technician may select an increment for notification, such as to be notified every time the fuser counter reaches another thousand counts. In addition, the

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technician may select as a trigger condition an immediate call back. Such a trigger condition would be useful where the technician use the remote monitoring computer 170 through a long distance telephone connection, and desires the Host to initiate the call to reduce the technician's costs. The trigger conditions may be reset in step 435 and the processor 230 begins a monitoring and notification loop in step 440 (Miyachi, Col. 9, line 40-Col. 10, line 50). Thus, a request of notifying of a condition of a system attribute as discussed above comprises information specifying the process of extracting system attribute from a database, monitoring system for existence of condition of attribute and presenting it to a user. In other words, the Miyachi technique indicates the *request comprises information specifying a query for said system attribute*; and *using said query for monitoring said system for existence of said condition of said attribute*. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Miyachi method by using query for monitoring condition of system attributes in order to maintain and repair electronic devices in a network.

Regarding to claim 13, Miyachi teaches a computer product for providing notification of a technician remote from a machine of the need for machine assistance (Miyachi, Col. 3, lines 43-57). As shown in FIG. 1 is a LAN 100 includes a file server 120, workstations 150, printers 180 and a Host 110b coupled to one another via network communications lines 160 (Miyachi, Col. 4, line 38-Col. 5, line 8). As shown in FIG. 2 is a data processing system comprising the MFP 110a (multifunction peripheral), and the Host 110b. The MFP 110a includes a non-volatile rewritable data storage

device 245 for storage of various information, include information regarding the status of operation of the MFP 110a. The Host 110b is responsible for periodically initiating a refresh of a status information database, which is obtained from the MFP 110a and stored in the non-volatile rewritable data storage device 240. (Miyachi, Col. 5, line 9-Col. 8, line 67). As shown in FIG. 4 is a process for retrieving status information of a MFP. After the program has been loaded in step 410, the program allows a technician to select a number of MFP status conditions as shown in Tables 1-2, or the entire database to monitor in step 420. In step 425-430, the technician is allowed to designate a notification method and select a number of trigger conditions. Status information is retrieved, and the Host's MFP status database is updated at steps 440-445. If the process is to continue, then the processor 230 analyzes the status information database in step 455, and determines if any of the trigger conditions have been met in step 460 (Miyachi, Col. 9, line 35-Col. 10, line 57). Thus, the processor 230 receives a trigger condition from a technician as a request for notifying the client the condition of an attribute of MFP, and the technique as discussed indicates the steps of *receiving from a client a request to notify said client of a condition of an attribute of a system; deriving data about said system attribute; determining from said derived data if said condition exists*. Miyachi further discloses the step of *upon determining that said condition exists, notifies said client of the existence of said condition* by initiating a notification in step 465 as indicated in the settings received in step 425 (Miyachi, Col. 10, lines 58-65). Miyachi does not explicitly disclose the *request comprises information specifying a query for said system attribute*; and the step of *querying said system as specified by said request*. However,

as shown in FIG. 4, a technician is allowed to select a number of MFP status conditions to monitor in step 420. Preferably, the technician may be notified of any of the status conditions in Table 1 and Table 2 of Cols. 6-8, and there is an option to provide the entire database. In step 425 the technician is allowed to designate a notification method. This preferably comprises designating the telephone number of the remote monitoring computer 170, but might also include designating a workstation 150 on the LAN 100 to be notified. Next, the program allows the technician to select a number of trigger conditions to trigger notification in step 430. The technician preferably may select particular values at which a trigger condition is to be met. For example, the technician might want to be notified when the fuser counter reaches a particular value. Preferably, the technician may select an increment for notification, such as to be notified every time the fuser counter reaches another thousand counts. In addition, the technician may select as a trigger condition an immediate call back. Such a trigger condition would be useful where the technician use the remote monitoring computer 170 through a long distance telephone connection, and desires the Host to initiate the call to reduce the technician's costs. The trigger conditions may be reset in step 435 and the processor 230 begins a monitoring and notification loop in step 440 (Miyachi, Col. 9, line 40-Col. 10, line 50). Thus, a request of notifying of a condition of a system attribute as discussed above comprises information specifying the process of extracting system attribute from a database, monitoring system for existence of condition of attribute and presenting it to a user. In other words, the Miyachi technique indicates the *request comprises information specifying a query for said system attribute*; and the step of *querying*



*said system as specified by said request.* Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Miyachi method by using query for monitoring condition of system attributes in order to maintain and repair electronic devices in a network.

Regarding to claim 18, Miyachi teaches a system for providing notification of a technician remote from a machine of the need for machine assistance (Miyachi, Col. 3, lines 43-57). As shown in FIG. 1 is a LAN 100 includes a file server 120, workstations 150, printers 180 and a Host 110b coupled to one another via network communications lines 160 (Miyachi, Col. 4, line 38-Col. 5, line 8). As shown in FIG. 2 is a data processing system comprising the MFP 110a (multifunction peripheral), and the Host 110b. The MFP 110a includes a non-volatile rewritable data storage device 245 for storage of various information, include information regarding the status of operation of the MFP 110a. The Host 110b is responsible for periodically initiating a refresh of a status information database, which is obtained from the MFP 110a and stored in the non-volatile rewritable data storage device 240. (Miyachi, Col. 5, line 9-Col. 8, line 67). As shown in FIG. 4 is a process for retrieving status information of a MFP. After the program has been loaded in step 410, the program allows a technician to select a number of MFP status conditions as shown in Tables 1-2, or the entire database to monitor in step 420. In step 425-430, the technician is allowed to designate a notification method and select a number of trigger conditions. Status information is retrieved, and the Host's MFP status database is updated at steps 440-445. If the

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process is to continue, then the processor 230 analyzes the status information database in step 455, and determines if any of the trigger conditions have been met in step 460 (Miyachi, Col. 9, line 35-Col. 10, line 57). Thus, the processor 230 receives a trigger condition from a technician as a request for notifying the client the condition of an attribute of MFP, and the technique as discussed indicates: *means for storing a reporting application; a means for executing said reporting application*; wherein reporting application includes computer executable software code for *receiving from a client a request to notify said client application program of a condition of an attribute of a system; determining if said condition exists*. Miyachi further discloses the step of *upon determining that said condition exists, notifies said client of the existence of said condition* by initiating a notification in step 465 as indicated in the settings received in step 425 (Miyachi, Col. 10, lines 58-65).

Miyachi does not explicitly disclose the *request comprises information specifying a query for said system attribute*. However, as shown in FIG. 4, a technician is allowed to select a number of MFP status conditions to monitor in step 420. Preferably, the technician may be notified of any of the status conditions in Table 1 and Table 2 of Cols. 6-8, and there is an option to provide the entire database. In step 425 the technician is allowed to designate a notification method. This preferably comprises designating the telephone number of the remote monitoring computer 170, but might also include designating a workstation 150 on the LAN 100 to be notified. Next, the program allows the technician to select a number of trigger conditions to trigger notification in step 430. The technician preferably may select particular values at which a trigger condition is to be met. For example, the technician might want to be notified when the fuser counter reaches a

particular value. Preferably, the technician may select an increment for notification, such as to be notified every time the fuser counter reaches another thousand counts. In addition, the technician may select as a trigger condition an immediate call back. Such a trigger condition would be useful where the technician use the remote monitoring computer 170 through a long distance telephone connection, and desires the Host to initiate the call to reduce the technician's costs. The trigger conditions may be reset in step 435 and the processor 230 begins a monitoring and notification loop in step 440 (Miyachi, Col. 9, line 40-Col. 10, line 50). Thus, a request of notifying of a condition of a system attribute as discussed above comprises information specifying the process of extracting system attribute from a database, monitoring system for existence of condition of attribute and presenting it to a user. In other words, the Miyachi technique indicates the *request comprises information specifying a query for said system attribute*. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Miyachi method by using query for monitoring condition of system attributes in order to maintain and repair electronic devices in a network.

Regarding to claim 2, Miyachi teaches all the claimed subject matters as discussed in claim 1 but fails to disclose the step of *generating derived data based upon the result of said query of said system*. However, according to Miyachi, the client may be notified of any of the status conditions or the entire database after the step of status condition selection (Miyachi, Col. 9, lines 39-46), this implies the step of generating

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derived data based on the result of selection step. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to include the step of generating data based on the result of querying in order to display the result in a predefined format.

Regarding to claims 3 and 16, Miyachi teaches all the claimed subject matters as discussed in claims 1, 13, Miyachi further discloses: *condition is a change in said attribute* (Miyachi, Col. 9, lines 55-65).

Regarding to claim 4, Miyachi teaches all the claimed subject matters as discussed in claim 1, Miyachi further discloses: *the attribute is selected from the group of status of peripheral device, access to local peripherals* (Miyachi, Col. 5, line 57-Col. 8, line 60). Miyachi and Sybase fails to disclose the attribute is selected from the group of: *membership of nodes within a cluster, configuration of a cluster, failure of computer hardware, addition of shared peripherals, removal of shared peripherals, ownership of a shared peripheral, availability of shared peripherals for addition to a cluster, resilience to faults of a High Availability cluster, performance potential of a cluster, and any combination thereof*. However, Miyachi discloses the background of the invention as a local area network (LAN), which linked one or more peripheral devices such as printers, facsimile machines, scanners or plotters and typically, the status of a device (Miyachi, Col. 9, lines 10-24). Thus, the Miyachi status tables as in col. 6-8 can be modified to have the condition state of a node if a user wants to know the condition of a node within a cluster

or the configuration of a cluster and even the condition to indicate the failure of computer hardware, addition of shared peripherals, removal of shared peripheral, ownership of a shared peripheral, availability of shared peripherals for addition to a cluster, resilience to faults of a High Availability cluster, performance potential of a cluster. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Miyachi status table in order to query the condition of a network's device especially the condition about the status of a node within a cluster when a new node is added or deleted from the system.

Regarding to claim 8, Miyachi teaches all the claimed subject matters as discussed in claim 1, Miyachi fails to teach: *information specifying a query for said system attribute comprises multiple transactions bracketed together* (Col. 9, line 55-Col. 10, line 21).

Regarding to claims 9 and 17, Miyachi teaches all the claimed subject matters as discussed in claims 1, and 13, Miyachi further discloses: *multiple transactions bracketed together, wherein upon determining that such bracketed condition exist, notifying said client of the existence of such bracketed conditions* (Col. 9, line 55-Col. 10, line 12).

Regarding to claim 10, Miyachi and Sybase teach all the claimed subject matters as discussed in claim 9, Miyachi further discloses *the multiple changes are bracketed*

*together, wherein upon determining that such bracketed changes exist, notifying said client of the existence of such bracketed changes* (Col. 9, line 55-Col. 10, line 12).

**4. Claims 5 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyachi [USP 6,108,492] in view of Onaga [USP 6,266,693 B1].**

Regarding to claim 5, Miyachi teaches all the claimed subject matters as discussed in claim 1, but fails to disclose: *client is selected from the group consisting of a user and a client application program*. Onaga teaches a method for monitoring status of multifunction peripherals (Onaga, Col. 1, lines 25-30). Onaga further discloses four classes of users and each of these classes is given access to different classes of peripheral settings and features or *client is selected from the group consisting of a user and a client application program*. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to include the step of selection of client from the group of a user and a client application program into the Miyachi method in order to control the access of client.

Regarding to claim 11, Miyachi teaches all the claimed subject matters as discussed in claim 1, but fails to disclose: *client is a graphical user interface (GUI) that displays information to a human user*. Onaga teaches a method for monitoring status of multifunction peripherals (Onaga, Col. 1, lines 25-30). Onaga further discloses *client is a graphical user interface (GUI) that displays information to a human user* (Onaga, FIG. 9).

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Miyachi method to have a graphical user interface in order to display information to a user.

**5. Claims 6-7, 14, and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyachi [USP 6,108,492] in view of Sybase [Transact-SQL User's Guide, Copyright 1996].**

Regarding to claims 6 and 14, Miyachi teaches all the claimed subject matters as discussed in claims 1, and 13, and further disclose *the status information are stored in a database and a client may select some or all of the information for a predefined trigger condition* (Miyachi, Col. 3, line 60-Col. 4, line 5; Fig. 4, Col. 9, lines 34-47). Miyachi fails to teach *information specifying a query for said system attribute is an SQL query*. Sybase teaches SQL as a high-level language includes commands for retrieving data from a database, creating database object and other functions (Sybase, Chapter 1: Introduction, Overview). As shown in Chapter 1 is the method of creating SQL statements by using select command. As shown in Chapter 14 is the method of creating trigger conditions by using SQL statements. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Miyachi method by including the technique of defining a trigger condition by using SQL query as taught by Sybase, and by including the Sybase technique, a user-friendly system could

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be provided to the user by defining a trigger condition via either a SQL query or a pre-defined query.

Regarding to claim 7, Miyachi and Sybase teach all the claimed subject matters as discussed in claims 6, Sybase further discloses: *SQL query comprises an SQL view* (Sybase, Chapter 8, Views: Limiting access to Data, Creating Views).

Regarding to claim 20, Miyachi and Sybase teaches all the claimed subject matters as discussed in claim 18, Sybase further discloses the system comprises: *multiple nodes, wherein at least one of said nodes is executing said reporting application* (Miyachi, Fig. 1-2, Col. 4-5).

Regarding to claim 21, Miyachi and Sybase teaches all the claimed subject matters as discussed in claim 13, Miyachi further discloses the step of *periodically querying the system* (Miyachi, Col. 10, lines 14-21).

Regarding to claim 22, Miyachi and Sybase teaches all the claimed subject matters as discussed in claim 18, Miyachi further discloses the step of *monitoring system to determine if said condition exist* (Miyachi, Col. 5, lines 57-65).



**6. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miyachi [USP 6,108,492] in view of Onaga [USP 6,266,693 B1] and Sybase [Transact-SQL User's Guide, Copyright 1996].**

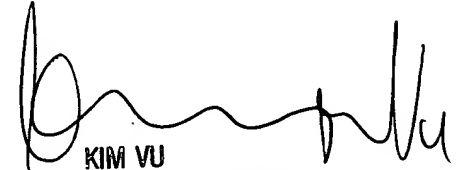
Regarding to claim 12, Miyachi and Onaga teaches all the claimed subject matters as discussed in claim 11, but fails to teach the step of deriving data to determine if a condition of said one or more attributes exists such that the GUI should redraw the graphics displaying said information about said one or more attributes. Sybase teaches retrieving data through views by using SQL, the SQL server checks to make sure that all the database objects exist and create a view that includes all the attributes as indicate in the condition of the query (see Chapter 8, Views, Limiting Access to Data, What are Views?, Retrieving Data through Views). Thus, the Miyachi, and Onaga method can use SQL to implement the step of condition determination and graphic redrawing to make sure the attributes exist and provide a view for these attributes. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Miyachi and Onaga method by applying SQL to implement the steps of condition determination and graphic redrawing to determine if a condition of one or more attributes exists such that GUI could redraw the graphic displaying.

### ***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Pham whose telephone number is 703-605 4242. The examiner can normally be reached on Monday-Friday, 7:00 Am - 3:30 Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, VU, KIM YEN can be reached on 703-305 4393. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746 7239 for regular communications and 703-746 7238 for After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305 3900.

Examiner: Hung Pham  
May 8, 2003



KIM VU  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100